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CASES IN MIDWIFERY,

With Remarks.

BY

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CASES IN MIDWIFERY.

The following cases are published, not from any novelty or peculiar interest that they possess,—for such are occurring every day in a crowded city—but from a conviction that it is the duty of every one to present the experience he has been enabled to gather, in order that some industrious compiler of statistics may use his little store of materials to benefit the profession. In a department like midwifery, where statistics are so readily obtainable, and where precedents are of so much value in directing practice, there is less excuse for neglecting to record cases, than in other departments, where a doubt in diagnosis, or perplexity in choosing the proper means of relief, would deter from committing results to writing.

Fifteen years of professional experience have enabled me to collect the accompanying cases.

Face Presentations.—Face presentations were met with eight times. In four cases, complications existed which invalidated the life of the child; viz.: twice the fœtus was anencephalous, once rupture of the uterus existed, and once the funis presented with the face, and as much delay had

occurred through previous manipulation, perforation was employed as the best mode of relieving the mother. Regarding these as necessarily fatal to the child, the *results* were: to the mother, favorable in all except the case of ruptured uterus; to the child, favorable in four cases; necessarily dead, four. *Mode of delivery.*—Unassisted, six cases; by perforation, two cases. *Length of labor.*—The longest was fourteen hours; the shortest four hours. *Presentation.*—Noted in four cases, three of which were left mento-iliac, one right mento-iliac.

Presentations of Inferior Extremities.—Under this head are included presentations of breech, knees, and feet, as no difference in the plan of treating such varieties was deemed necessary.

The total of cases noted is twenty-seven. Of these, there occurred, as single births, twenty; while seven were in connection with twins.

Results.—No fatal result to mother occurred. Of the children, twelve are recorded as still-born, of which two were putrid and two others premature. Deducting these, eight births out of twenty-seven were still. Of the still-born, three are noted as multiparous, four as primiparous. *Sex.*—Eleven girls to twelve boys are noted; in the other cases not noticed. *Recurrence.*—In one case, all the births (four) were by the breech; in another, all (five) were breech; in one there were two breech deliveries out of eight labors. The only case worthy of special record is as follows:

Case 3.—Patient primipara, aged 32 years. The fœtus presented by the breech, its abdomen being toward the abdomen of the mother. The body of the child was rotated so as to bring the face toward the sacrum after the delivery of the arms, but all manual efforts for the delivery of the head failed, though assisted by ergot. It was then suspected that the head might be hydrocephalic, and accordingly a puncture was made through the orbit with a trocar, which was the only instrument at command. Delivery was then readily effected. This was an unusual complication of diffi-

culties, the position was the worst of the breech presentation, and the diagnosis of hydrocephalus was but problematical, as no fluctuating point could be reached. It was noticed that immediately on ceasing tractive efforts the head receded, but the true state of the case was only suspected until confirmed by the effect of puncturing the cranium. The long continued efforts (thirty-two hours) resulted in vesico-vaginal fistula. This patient was under my observation as an hospital nurse for fifteen years, and managed to perform her duties without exciting suspicion of her condition.

Presentations of the Superior Extremities and Cases of Version. *Case* 1.—Seen in consultation. Right hand of a premature fœtus presented. Delivery effected readily by version.

Case 2.—A multipara pregnant with her third child. Before the membranes ruptured, a presenting part was detected through the partially dilated os, which was supposed to be the elbow, but when the waters escaped, this was found to be the right foot. In the expectation that labor would progress without serious difficulty, time was allowed for further development; but it was ascertained that instead of the foot descending, a hand was substituted. Action being non-avoidable, the hand was passed into the uterus, a foot seized, and by it version was effected. The child, a male, was resuscitated with difficulty. Phlegmasia dolens supervened during the second week after delivery, but the patient eventually recovered.

Case 3.—Multipara, aged 25. The physician in attendance came for me four hours after the rupture of the membranes. The right hand was found presenting. Version was readily effected; but there was no pulsation in the cord, and the child, a male, was still-born.

Case 4.—Multipara with fourth conception. Ten days before labor commenced she had hemorrhage, but it did not recur at the time of labor. The patient was seen twelve hours after the commencement of pains, and the right arm was found protruding from the vulva much swollen. As the

pregnancy had not advanced to full term, the possibility of spontaneous evolution suggested itself; but it was deemed more advisable to turn. Considerable difficulty was experienced in effecting version; the small size of the limb prevented a firm grasp, and powerful uterine contractions produced much annoyance in manipulating. Success was finally obtained by passing the hand over the breech in utero and steady traction.

Case 5.—*Version.*—Referred to as tenth case of twins. The first child having been delivered by forceps, in consequence of convulsions, the second was turned.

Case 6.—A multipara in her third labor. The child presented with both hands. In ineffectual efforts to turn, her attendant had exhausted his strength, and solicited assistance. The right foot was found in the vagina with a fillet upon it, the left foot higher up, both hands posteriorly much swollen, and finally a loop of the cord not pulsating. By the aid of chloroform, version was effected with considerable exertion, and the body delivered as far as the shoulders; with these much difficulty was experienced, as the arms were greatly swollen. This done, the body of the fœtus was turned strongly over the mother's abdomen, and the head easily delivered. Child dead.

Case 7.—A multipara, aged 29, with her tenth conception, and in the seventh month. The child presented by the right elbow. Version was effected without difficulty, and a living female child delivered.

Case 8.—Referred to as Case 13 of twins. The second child presented with cord, hand and foot. Version was attempted without chloroform, but though the foot was brought externally, the uterus prevented turning, until relaxed by chloroform. The child, a male, was still-born.

Case 9.—A primipara. About nine hours after the commencement of labor, she was found with a hand and head presentation. Delay was advised, in hopes of natural delivery; but, after five hours, no progress being made, the application of forceps was commenced. Immediately on

passing in the hand the head receded, and the fœtal hand descended. No alternative was left but version, which was effected without much difficulty. The child, a girl, gasped but once.

Case 10.—A multipara, aged 23, with her second conception. The child presented by the right elbow. Version was easily accomplished; but the child, a male, was still-born.

Case 11.—A multipara in her fourth labor. She had been under the care of a student, who, on ascertaining the presentation to be of the superior extremity, sent for assistance. The previous labor had been tedious. The right arm was found protruding from the vulva, and the uterine contractions energetic. Chloroform was administered with happy effect, in relieving the contractions, and version commenced. The right hand was first tried, and came immediately in contact with a very salient sacral promontory; the cord did not pulsate. The child lay with the abdomen to the mother's abdomen, the right arm being extruded. With my right hand the foot could not be reached, but on substituting the left, version was easily produced. No delay was experienced until the head engaged, when owing to the diminution of the antero-posterior diameter, by the projecting promontory, the head became arrested and required much exertion to free it. The child, a boy, was dead before the operation.

Case 12.—A multipara, æt. 27 years, in her third labor. The presentation was funis with the right hand. Version was effected readily under the influence of chloroform, and a male child born in an asphyxiated condition. It was resuscitated.

Case 13.—A multipara, aged 40 years, with her fifth conception. Case referred to as fifth of rupture of uterus. The patient was in an apparently desperate condition, but version seemed the most feasible means for a favorable issue. No trouble was experienced in finding the feet or in delivering. The foot was lifted over the distinct edge of a rent in the

right side of the uterus. The child, a male, was dead before beginning. The mother recovered.

Remarks.—Thirteen cases are given in which version was required for delivery, of which the results were to the mother favorable in all, to the child favorable in only three instances. Of these one was premature, and five were certainly dead before the operation was commenced. The sex of the children is given in nine cases, of which seven were male and two female.

In performing version, no effort has been made to grasp both feet, but a selection of the foot opposite to the presenting hand has been attempted, and this experience proves to be the most satisfactory mode of manipulating. In cases where one foot has been brought externally, and delay has occurred in producing turning, it has been thought that benefit has ensued from passing the hand beyond the breech, while traction is made on the foot in the vagina, and thus, by the double purchase, some refractory cases have yielded.

Convulsions.—Cases of eclampsia only have been placed on record, though several more have been visited. In some, a single visit, perhaps, has been made, and the history not obtained, with the requisite minuteness to warrant any deductions from them. Of the seven cases the following particulars are recorded. *Variety of convulsion.*—In six, epileptiform; in one, hysterical. *Time of occurrence.*—During labor, in all, seven; continued afterward in four cases. *Number of labors.*—All were primiparous except one, the hysterical case. *Number of convulsions.*—In two, four; in one, eight; in one, fourteen; in one, eighteen; in one, a single hysterical paroxysm; and in one, fifteen. *Number of children.*—One was a case of twins; all the rest were single births. *State of the urine.*—Noted in five cases, in all of which albumen was found. *Premonitory symptoms.*—In three, only pain in the head was spoken of. Œdema was a prominent symptom in all except the hysterical case, and in this the feet alone were œdematous. *Mode of treatment.*—In all but one venesection was used; chloroform was employed in four cases; tartar emetic in two cases; enemata, sinapisms,

and cups were used, but not noticed, in all. *Mode of delivery.*—In three cases natural efforts effected expulsion; in four, forceps were used; and for the second twin, version was employed, the only case. *Results.*—Favorable to mother in five cases, two deaths. Of children four were saved, and four were still-born, both twins being dead.

Of these cases the most worthy of record was the twin-birth. When seen, the woman appeared past all hope of recovery. She had had fifteen convulsions, was perfectly insensible, the pulse being feeble and very rapid. Delivery was attempted rather from a consciousness of duty than with any hope of beneficial effect, and was produced, the first child by forceps, the second by version. It was presumed on leaving the patient that she would soon die; but on meeting her attendant, some little time after, he informed me that she had recovered,—an exemplification of a cardinal rule in midwifery, not to suffer a woman to die undelivered.

Hemorrhage.—No record has been kept of hemorrhage, in connection with abortion. Twenty-eight cases of different varieties of flooding have been met with, in some instances slight, in others serious, and in one only (Case 3rd of placenta prævià) has there been a fatal issue. The instances enumerated as slight have been mostly where bleeding occurred with retained placenta, and, with these exceptions, no case has been deemed worthy of record as one of flooding, unless some obvious general effect upon the patient was produced.

Causes.—Six cases of unavoidable hemorrhage are given under the head of placenta prævià. Six are recorded with retained placenta. Two with "uterine hydatids." Two of placental apoplexy. Of the remainder, inertia of the uterus was the cause in four cases; detached placenta in one, and in five no reason is specified.

Time of occurrence.—Before labor in fourteen cases. During labor in ten. Before the delivery of the placenta in fourteen; (the cases of placenta prævià are reckoned under all

these heads.) After the delivery of placenta in six. Secondary hemorrhage is noticed in one instance.

The number of cases of flooding is apparently large, yet special efforts to prevent this accident have always been made. A uniform practice was early commenced, and has been constantly adhered to, of placing one hand over the fundus uteri as soon as the head was delivered, and maintaining steady pressure as the child was expelled, which was only *personally* remitted during the necessary attention to the child, until the placenta was delivered. An attendant's services have—while engaged in tying the cord, and then only—been substituted for my own compression. During the last two or three years, as a means of preventing flooding after delivery, a small book wrapped in a napkin has been placed over the uterus and the binder *tightly* applied.

With all these precautions there have been some instances where more blood was lost than was desirable. In such cases reliance has been placed on ergot, which has proved so far, a satisfactory anti-hemorrhagic. This drug has also been given when flooding was anticipated from its occurrence in former labors. In the special cases as those of unavoidable hemorrhage, etc., the treatment is given under the appropriate heads.

As a means of preventing a return of flooding, manual compression has been most relied on even in preference to, though not to the exclusion of, the use of cold in its various forms. In the severest case of flooding from inertia, pressure was maintained by my own hands for five hours consecutively, a service correctly appreciated only by those who have been similarly employed. Nevertheless, it seemed at the time the only measure that prolonged life. As a *temporizing* measure in flooding before labor or before delivery, the alum plug has been relied on with much confidence, and in no ordinary case has it disappointed; but its use is attended with one serious inconvenience in cases where operative measures become necessary. So great a corrugation of the vagina is produced, and such dry and obscuring coagula are

formed, that no slight embarrassment in manipulating occurs. With this objection, however, it is a remedy of value, and in hemorrhages connected with abortion it has been found peculiarly useful.

The following cases are, perhaps, worthy of special record :—

Case 1.—While visiting Bellevue Hospital wards, my attention was called to a woman who had just been delivered of a male child, after a natural labor followed by spontaneous expulsion of the placenta. Notwithstanding that the uterus appeared to be well contracted, blood continued to flow. On examining, there was found projecting from the vulva a tumor of fleshy consistence, and about two inches broad, which on being traced up, was found to be attached to the anterior lip of the os uteri, so that its length was about four inches. From the bed at least a quart of clotted blood was removed. Pressure aided by ergot failing to control this bleeding, a hand was passed into the uterus and a clot removed. The stimulus of the hand together with strong external pressure, seemed to be efficient in checking the flooding. Subsequently ergot was given more rapidly, and there was no further flow. About four weeks after confinement an examination was made with the speculum, and on the anterior lip was a projection about one inch long, half an inch wide, and about one quarter of an inch raised above the surface. The os uteri presented an excoriated surface from which a bloody purulent fluid was oozing.

Case 2.—The following case was published in the *N. Y. Med. Times* for August, 1854, from which an abbreviation is now made. A multipara, aged 40 years, about 6½ months advanced in pregnancy, had been exerting herself during the morning, and while conversing in the afternoon she became pale and faint. She was assisted to bed, and soon became nauseated, and complained of distressing distention of the abdomen. Previous to this occurrence her abdomen had been quite small for the supposed time of pregnancy; now, however, the increase in size not only attracted her own attention

but became manifest to bystanders. Both bowels and bladder had been evacuated during the day. When seen about three hours after this attack the patient was pale and faint, with a cool surface, feeble, compressible, rather slow pulse, disposed to gape and to vomit. The principal complaint was of the sense of distention, which she spoke of as a "feeling like bursting." On examining the abdomen the uterus was found distended to the size of full term of pregnancy, the portion of the organ in the right hypochondrium appeared to be more elevated than the rest, and there was an obscure sense of fluctuation in this region. Percussion detected flatus in the epigastric region, while, by the ear, neither fœtal pulsation nor placental murmur could be discovered. Vaginal examination discovered no hemorrhage, and the cervix uteri was undeveloped. During the next afternoon labor commenced, and a small quantity of dark fluid-blood was discharged. About nine hours after this, the os being well dilated, the membranes were ruptured manually, a large quantity of liquor amnii escaped, and the next contraction expelled the fœtus with the placenta, and a large quantity of clotted blood, in amount, as was subsequently ascertained, at least two quarts. The placenta was unbroken on its fœtal surface, but the maternal aspect bore evidences of detachment over fully three-quarters of its extent. The patient recoverd.

Another instance of this form of hemorrhage presented itself some years since. In this case the labor was progressing satisfactorily, when the patient became faint, sick at the stomach, restless, and exclaimed that she was going to die. No blood escaped from the vagina. After a momentary lull of contraction, pains came on vigorously, the liquor amnii was discharged, uncolored, but with the placenta several large clots of blood were expelled. This woman also recovered.

Case 3.—*Secondary Hemorrhage.*—A primipara was delivered on the 12th of May. She had a slow getting up, and while engaged in washing, June 1st, had some bloody dis-

charge. On the 4th of June, twenty-three days after delivery, while at church, and standing at the baptism of her child, flooding came on. She continued to stand until she became faint, and was carried home. By the application of ice and a bandage the flooding was checked. Two days after, on visiting her, she was found on the floor, pale and faint, and with some recurrence of bleeding; she was very imprudent in exertion, but recovered after a tedious convalescence.

In one other case hemorrhage, to a considerable extent, occurred on the 10th day.

Placenta Prævia. *Case* 1.—Multipara pregnant with her eleventh child. Five days before delivery noticed a slight discharge of blood accompanied by slight pain. By vaginal examination the os uteri was thick and patulous, but no presentation could be distinguished. The next day but one after, she lost a large quantity of bright blood by gushes, accompanied by pain, for restraining which pills of lead and opium sufficed. On the succeeding day small losses of blood continued. In the evening a small portion of the placenta could be detected over the os, but as the labor advanced the hemorrhage gradually ceased, and no interference was deemed necessary, for the membranes ruptured spontaneously, and with the next contraction the head was expelled. The child, a boy, was apparently lifeless when born, but was resuscitated. Convalescence was protracted and precarious. The patient suffered from fecal accumulation, complicating the effects of loss of blood so as closely to resemble puerperal fever.

Case 2.—A Multipara with her fourth conception, was delivered after a labor of fifteen hours. The first evidence of labor was hemorrhage, and on examination, her attendant discovered a small portion of placenta over the os uteri. At the time of my visit, the patient was considerably blanched and restless, the pulse being feeble. The os was nearly dilated, and each pain caused an increased flow. The indication seemed to be to effect delivery by the contractions of the uterus itself, instead of by forceps, and for this purpose

ergot was given with good effect. Its influence was kept up until delivery was completed, by the expulsion of the placenta with a large gush of fluid blood. The child was still-born.

Case 3.—Referred to as Case 14 of forceps. Hemorrhage came on at the seventh month of gestation, and continued with some intervals until delivery, there being no pain, and the os undilated. Only temporizing measures were used. At the time of my visit, the patient was perfectly pallid, but the uterine efforts were regular, and producing some effect. Nature was making a last rally. Stimulants and ergot failed to effect expulsion, and, as a last resort, forceps were used readily, and a still-born child extracted. The placenta was delivered soon after, but the exhaustion had been too great, and death occurred in less than two hours.

Case 4.—Multipara, æt. 34. When about five months advanced she was jolted in a carriage, and on the following day a colored mucous discharge occurred, which continued more or less for some time. About six weeks after this, while quiet in bed, a gush of blood occurred, about four ounces in amount, and without pain. The os was patulous and no presentation appreciable. The flooding recurred on the following night while dropping asleep. An alum plug suppressed the hemorrhage for four days. On this day hemorrhage returned and labor commenced, and during the day the bleeding was considerable and accompanying the pains. Alum again moderated the flow, and acet. plumb. was given with untoward effect, for nausea and faintness followed its use. By examination the placenta was centrically implanted. The alum had produced constriction and coagula impeding attempts at version. The placenta was now detached manually and the hemorrhage ceased. Very soon after the detachment, the faintness which had required stimulants was relieved. The pains ceasing, ergot was used for their renewal, and, after an interval of about an hour, contractions became ergotic and delivery was effected.

Case 5.—A multipara, æt 22, with her second conception.

While quiet in bed, about three A.M., the patient was seized with flooding, and on my arrival she was in a pool of blood. The os uteri was of the size of half a dollar, and on the right side soft, pulpy, and loose. The woman was not conscious of the commencement of labor, but the examination seemed to develop contraction, and that quite actively. At each pain hemorrhage occurred with a gush and labor, advanced rapidly. The membranes were ruptured, and the flooding ceased. A few pains sufficed to deliver the child, but it was perfectly lifeless.

Case 6.—Multipara with her second child. Four days before my visit, flooding occurred without pain, the woman being at full term of gestation. The tampon was used satisfactorily until to-day. On the recurrence of the bleeding, the placenta was found partially over the os, the head being beyond. Ergot was advised. On my arrival, labor was found to be actively progressing, and the hemorrhage had ceased. No interference was deemed necessary, and delivery of a dead male child was soon accomplished, the detached placenta following very soon. The patient was much blanched from loss of blood, but recovered slowly.

Remarks.—Six cases are given, one of which proved fatal to the mother, while of the children only one was saved. Two cases occurred at the seventh month of pregnancy. The amount of placenta detectable was partial in all except one case, (No. 4,) where it was centrical. The mode of delivery was by uterine efforts, aided more or less by ergot, in four of the cases; by forceps in one case (fatal); and by detaching the placenta in one case. Rupturing the membranes was of service in three cases. Case fourth is the only one in which the practice so ably advocated by Prof. Simpson, has been seen, and in this the effect of detaching the placenta completely was so satisfactory as to warrant a repetition of the practice under similar circumstances. Almost immediately after detachment, the system seemed to rally as if nature appreciated the relief from a fatal drain, and from that moment the patient's condition, before alarming, improved.

Retained Placenta. *Case* 1.—Multipara delivered of her ninth conception without professional assistance. About eighty hours after delivery my attendance was requested to deliver the placenta, which was found to be *in utero*. Ergot to the extent of two drachms was given with the effect of expelling the mass which seemed to have been recently attached over about one-third of its surface. Subsequently she was purged severely, and as was supposed, by anomalous action of the ergot.

Case 2. — *Placenta retained by adhesion.* A primipara, aged 20, delivered after an ordinary labor of seven hours duration. The uterus was well contracted, and a portion of the placenta was found in the upper portion of the vagina; this was hooked down, but the placenta was now ascertained to be adherent. Hemorrhage, to considerable extent, occurred, and the placenta was detached and removed in portions. A binder and compress, with ergot, sufficed to restrain the flooding. On the fourth day a portion of placenta came away, which proved to be final, and the patient recovered, though slowly, having been considerably exhausted by loss of blood.

Case 3. — The same patient, in labor with her second child. From its previous occurrence, adhesion was anticipated in this case, and, to avoid it, firm pressure was kept over the uterus from the time of the expulsion of the head. After the child was expelled, the uterus could be felt enlarging beneath the hand, the patient became tremulous and agitated; suddenly the abdomen subsided with a gush, which was supposed to be the placenta passing. Examination, however, detected the placental mass partially detached, and in the vagina, while about half was attached within the uterus. This was detached manually, and expelled by vaginal contraction. No unpleasant consequences followed. In a subsequent labor this complication did not occur.

Case 4.—Multipara, aged 33, in labor with eighth conception. The labor was of twenty-four hours duration, and the expulsion of the shoulders was delayed. After the

delivery of the child, hemorrhage came on and the placenta was found attached over one-half its extent. It was detached manually, and the flooding ceased.

Case 5.—Multipara, aged 33, in labor with her sixth conception. After a severe labor of twelve hours the placenta was found to be retained by adhesion and irregular contraction. It was delivered by detaching and then removing it.

Case 6.—Referred to as sixth case of forceps. An adhesion, of about two inches in diameter, detained the placenta, and some hemorrhage occurred. Detached manually.

Case 7.—*Hourglass Contraction.*— A primipara, aged 28. The body of the child was violently extruded. Observing some hemorrhage, the hand was introduced, and found a sort of chamber on the right side of the uterus, whence the placenta was manually detached over a small space and uterine contraction expelled both hand and placenta.

Case 8.—*Adhesion.*—A multipara, æt. 30, about six and a half months advanced, in her fifth pregnancy, was subjected to violence which induced flooding and premature labor. After the expulsion of the child the placenta remained, notwithstanding severe expulsive efforts on the woman's part. The hand being introduced, found firm adhesion over about three-fourths of the placenta which was detached, and a contraction expelled the whole.

Case 9.—*Adhesion.*—A primipara was delivered after an ordinary labor of five or six hours duration. After the expulsion of the fœtus the placenta was found in the vagina, and the insertion of the cord was plainly distinguishable. On attempting to hook down the placenta with the finger, a small, narrow strip was found very firmly adherent with the os uteri. In manipulating to detach this, the narrow isthmus gave way, leaving a small portion of the placenta still attached. It was thought more prudent to leave the separation of this portion to time and the natural efforts, than to grope about with the hand, and without a guide in a firmly contracted uterus, and thus manually to injure the organ. The patient progressed favorably up to the tenth

day when she had considerable irritative fever, and a dark and fetid discharge. She recovered. In a subsequent labor adhesion did not occur.

Case 10.—*Adhesion.*—A primipara was delivered after a labor of more than ninety hours. After the expulsion of the child (which was born alive) the placenta was not cast off. As there was no hemorrhage, and the expulsive efforts were strong, no interference was attempted for half an hour. Delivery was then effected by introducing the hand and detaching the placenta over about half its surface.

Case 11.—*Adhesion.*—Case ninth of embryotomy. Placenta required manual delivery.

Case 12.—*Irregular Contraction.*—Case eleventh of embryotomy. After instrumental delivery, the placenta was detained by irregular contraction, and was found by the hand in a separate compartment of the uterus.

Case 13.—*Adhesion.* — The woman had been delivered after an easy labor, but the placenta was retained. At my visit, four and a half hours after the expulsion of the fœtus, the placenta was found partly in the vagina. On tracing it up, a strong adhesion existed to the uterus within the os, which was firmly contracted. Two fingers were used satisfactorily in detaching the adhesion, and then the whole was forcibly expelled with a gush of blood.

Case 14.—*Adhesion.*—A primapara had been delived after a tedious labor, but after waiting an hour her attendant could not deliver the placenta. The placenta was found completely adherent. Chloroform was used to quiet the patient, who was very restive, but it was not deemed expedient to produce its full effect, as a consequence, instead of facilitating, it embarrassed the operation. The effects were allowed to pass away, and then with much difficulty the placenta was detached and removed.

Case 15.—*Partial Adhesion.*—A primipara was delivered after an easy labor of six hours. A portion of the placenta descended into the vagina. On passing the hand into the uterus, the remainder of the placenta was found firmly at-

tached near the fundus. With one hand supporting the uterus, and the other manipulating inside, detachment was easily effected.

Case 16.—*Adhesion and Irregular Contraction.*—A primipara delivered with forceps (Case 28.) for eclampsia. The placenta was found adherent firmly over about three-quarters of its superficies, and in a chamber formed by irregular contraction. It was detached with some difficulty.

Remarks.—Of the sixteen cases given, the *cause of retention* was in fourteen cases from adhesion, and two from irregular contraction. In no case was inertia the cause of delay—a result attributable, it is thought, to the practice of firmly compressing the uterus with my own hand, from the time of the expulsion of the head to the severing of the cord. By pursuing this method, and firmly compressing the uterus afterwards, the placenta is usually found in the vagina. If not so found, there is usually adhesion, which, if flooding coexists, will require prompt detachment. In eight of the sixteen cases, hemorrhage occurred; in seven it was not present to any amount. In all the cases the result was favorable. In manipulating for the detachment of the placenta, it has been found greatly preferable to use one hand externally, to support the uterus, while the other is engaged internally, than to trust to even an experienced assistant. The manœuvre, easily accomplishable in the one method, has been found difficult by the other.

Funis Presentations.—*Presentations of the cord* have occurred in five cases. *Number of labor.*—Mostly multipara, one only being a primipara. *Duration of labor* varied from four hours to two days. *Complication.*—In one case the face presented with the cord, in one the hand and cord came down together, and one was a premature birth. *Sex of children* in all was male. *Mode of delivery.*—The simple cases were left to nature, except the case of two days duration, which was perforated. Embryotomy was also performed where the face presented; the third complicated with the arm suggested version, and in this only was the child saved.

Results.—Mothers all saved. To the child, embryotomy was fatal twice; once the birth was premature; twice compression of the cord caused death; and one was saved by turning.

Twins. *Case* 1.—A multipara, in her tenth parturition, was delivered, after three hours labor, of two girls. No delay occurred between the births; both presented by the head. Two placentæ.

Case 2.—Multipara, delivered of two girls after a labor of twenty-four hours, both presentations being vertex. The patient was completely unmanageable, and during the expulsion of the second fœtus, tossed off the coverings completely, so as to expose the fœtus in its passage. The fœtus was expelled, together with the placenta, the membrane not being ruptured. Single placental mass.

Case 3.—Multipara, about six months and three weeks advanced in pregnancy, confined with two girls, the first presenting by the vertex, the second by the breech. The children died on the day after birth.

Case 4.—Primipara, delivered of a boy after a labor of eight hours, vertex presentation. Uterine efforts now ceased, and were not renewed until forty-eight hours after the birth of the first child, when a girl was expelled also by vertex presentation. Both children were born alive.

Case 5.—Multipara, delivered of her third conception after a labor of nine hours. Two girls, both vertex presentation.

Case 6.—Primipara, delivered of two girls after a labor of forty-eight hours; both vertex; single placenta.

Case 7.—Multipara, delivered of her ninth conception after about one hour of labor. The children were both females. The presentation of the first was unknown, having been born before my arrival; the second was breech; two placentæ.

Case 8.—A primipara, anasarcous for two months, had complained of headache and occasional dimness of vision for some time; urine highly albuminous; both children presented footling, and were delivered with an interval of seven-

teen hours; both lifeless. The mother died on the third day, with granular degeneration of the kidney, as confirmed by the autopsy. No convulsions occurred; single placental mass.

Case 9.—A primipara, delivered of two boys after a labor of fourteen hours; both children presented by the breech, and both were in sacro-anterior positions; there was but one placental mass.

Case 10.—A primipara, delivered, by forceps and by version, of two girls, both still-born. When seen, she was quite comatose, having had fifteen convulsions; the first child was delivered by forceps, the second by turning; the woman was quite pulseless, and appeared moribund, but eventually recovered.

Case 11.—The first fœtus presented with hand, cord, and foot. Delivery was effected by version twenty-one hours after the commencement of labor. Pains then ceased, and were renewed, with partial effect, under the use of ergot; the soft parts became heated, and, as the fœtus seemed dead, perforation and speedy delivery seemed desirable; but this opinion was overruled, and after a delay of thirty-two hours more, a dead fœtus was expelled.

Case 12.—A primipara, æt. 22. The first child presented in the right-occipito-anterior position; the second by the breech. Both were females, and born alive.

Case 13.—A multipara, with her third conception, was in labor about four days. The first child presented right-occipito-anterior, and was born alive; the second presented by hand, cord, and foot, and required to be turned; both were boys, the second being still-born; there were two placentæ.

Case 14.—A multipara, in her sixth labor, was delivered two hours before my visit, of a living male child. Friction had been maintained, but labor did not progress. The membranes were ruptured, and with the second pain after, a female child was expelled, also alive. Both presentations were cephalic; the children were full-sized; the two placentæ were very heavy.

Case 15.—A primipara, aged 33 years. Her labor had been of about forty-eight hours duration when seen by me, and the head of the child, though small and quite movable, had not made perceptible progress for nearly twenty hours. There appeared to her attendant no special cause for delay, for the pains had been sufficiently energetic to effect delivery. The size and shape of the abdomen drew attention, and inquiry was made as to the possible existence of twins, as a cause of delay. After waiting to see the effect of contraction, it was decided to assist with the forceps, which was accordingly done, and a living male child delivered under a moderate influence of chloroform and ether mixed. Another child was discovered, also presenting by the head; but the uterine energies seemed to have been so much impaired as to be unable to expel the fœtus. Ergot was given, and produced some effect. About three and a half hours after the expulsion of the first child, a female living child was born without instrumental aid. There was but a single placental mass. This case is referred to as Case 29 of Forceps Deliveries.

Remarks.—Number of Labors.—Of the fifteen cases, seven occurred with multiparæ, and seven with primiparæ, one being unrecorded. *Sex.*—Noted in twelve labors; of these, two boys occurred twice, two girls seven times, a male and female in three instances. When the sexes have been opposite, the male has been the first born. *Presentations.*—Noted in fourteen cases; of these, two cephalic presentations occurred seven times, two breeches twice, one head and one breech three times, and twice with the second twin, a hand, the cord, and a foot presented. *Results.*—Living births for both twins occurred eleven times; both were still-born twice; and twice only one of the children was dead. One mother died from albuminuria. *Interval.*—In one case, forty-eight hours elapsed between the two births, once thirty-two hours, once seventeen hours, and once three hours; in the others, the second labor came on so rapidly as not to require notice. *Number of Placentæ.*—Recorded in nine cases. Of these, a single mass was delivered five times, and in four cases two placentæ were expelled.

Rupture of Uterus. *Case* 1.—Was seen after about two days labor. For thirty-six hours after the rupture of the membranes, there was little or no pain; the pains then became satisfactory, and the attendant supposed the labor would soon terminate; but the pains ceased, vomiting ensued, the skin became cool and clammy, and the pulse feeble, but the head did not recede, nor had any sudden, sharp pain, been noticed. These symptoms had occurred about seven hours before my visit. When seen, the patient was cool and clammy, pulse almost imperceptible and very rapid, vomiting frequent; over the hypogastrium a soft fluctuating tumor, which was supposed to be the bladder, but was proved not so by the catheter; per vaginam could be felt the forehead, the right orbit being at the right acetabulum. Forceps were tried, to save the child if possible; but the soft fluctuating feel created a suspicion of the nature of the case. The instrument, though locked pretty readily, slipped from the head. The perforator was then used, and a large quantity of bloody serum escaped, and the cranium collapsed and was readily removed by the crotchet. Care was exercised to produce uterine contraction, and stimulants freely used. The placenta was found in the vagina, and removed. The patient lived four hours after delivery, and about eleven hours after the supposed time of rupture. *Post mortem.*—On opening the abdomen, about half a pint of fluid blood was found. The peritoneal coat did not exhibit a rupture positively, but was supposed to be torn in the removal; for in the vicinity of the rent, the uterine tissue was softened. Upon the uterus, in spots, was a slight deposit of lymph, and some pus was found between the bladder and pubes. On opening the uterus, which was large, dark, and somewhat softened, a rent was discovered on the right side, anteriorly and near the neck; the vagina was intact.

Case 2.—A woman, æt. 20 years, who had had one abortion previously, and one severe labor, in which the child was still-born, was seized with labor-pains about forty-eight hours before my seeing her. Labor had progressed favorably

until the head had descended to the cavity of the pelvis. About this time the contractions ceased, but abdominal pain was present, and also vomiting. Her attendant attempted the application of the forceps, but the head receded on the introduction of the second blade. When seen, the patient was pale, livid, and distressed, tossing and complaining when the abdomen was touched, vomiting a yellow fluid, the pulse over 150. Through the abdominal walls the form of the fœtus was abnormally distinct. A perforation existed in the perineum, and a band was found in the vagina, the results of the former labor. The finger detected the head above the pubes. Forceps and embryotomy not being applicable, the question of gastrotomy was mooted, but decided against. The patient died ten hours after the supposed time of rupture, and three hours after the consultation. *Autopsy seventeen hours after death.*—On opening the abdomen, some bloody serum was found, and the fœtus, entirely escaped from the uterus, was lying in about the first obstetric position. In the flexure of the knee a knuckle of intestine rose up intensely reddened and covered with a film of fibrin. The omentum and parietal peritoneum also showed marks of inflammation. The child being removed, the placenta could be seen extruded from the uterus, while the uterus itself was in the right iliac region, measuring six inches in length by four and a half in breadth. The os uteri was not torn, but an inch above it, and on the anterior aspect, a large transverse rupture was found. The anterior vaginal wall was also extensively lacerated. The dimensions of the pelvis were: superior strait, antero-posterior diameter four inches, transverse four and a half; inferior strait, transverse three and a quarter, antero-posterior four and a half. The pubic arch resembled that of a male pelvis. The ilio-pectinal eminence on the right side was quite sharp.

Case 3.—A multipara, æt. 35, in labor with her sixth child. Her previous labors had been easy and natural, with the exception of the first, which was tedious. For about thirteen hours the present labor progressed slowly, with

weak and inefficient contractions. About this time the pains ceased; there was no sudden pain, no outcry or sensation of tearing, and the head, which had presented in the left occipito-anterior-position, did not recede. About seven hours after the cessation of the pains, she was visited and found lying on her back, with a sunken, haggard, and pale countenance, tossing to and fro, complaining of pain over the whole abdomen, right shoulder, and legs, the surface cool and moist, the pulse feeble and about 160. On examining the abdomen, portions of the fœtus could be distinctly felt on the left side, but on the right they could not be distinguished; the head had not receded. After passing the catheter, by which bloody fluid escaped, delivery with the forceps was attempted. The instrument used was of bad workmanship, and the blades yielded when delivery was nearly effected. Perforation then became necessary, and after removal of several pieces of bone, a male fœtus was delivered. The woman lived one hour and a half. No autopsy could be obtained.

Case 4.—Was seen with Dr. Metcalfe, by whom it has been published in the N. Y. *Medical Times*, *Nov.*, 1854. This patient recovered.

Case 5.—This case was reported by Dr. J. S. Monell, in the *N. Y. Medical Times*, Oct., 1854. The patient presented herself at my office about a year after in apparent good health.

The following case did not occur in my practice, but as it has never been published, it is now presented, somewhat compressed from the statement of Dr. E. W. Owen, by whom it was furnished at my request. A woman, aged thirty-seven years, in her seventh confinement, of good health, spare habit and nervo-sanguineous temperament, had suffered no more pain before labor than is usual. Labor commenced about noon; was summoned to, and saw the patient, at seven P.M. On examination, found the membranes protruding, the pains, having a true expulsive character, recurring at regular intervals, and having a good duration, the

presentation perfectly natural, the parts dilatable, well lubricated and cool. At one and a half, A.M., during a strong contraction, the patient complained of acute pain in the back and abdomen, running up in the direction of the umbilicus. The contractions ceased suddenly. The patient, during the pain, remarked that she felt as if she should burst. Made an examination during the pain, there was no recession of the head, no alteration in the form of the abdominal tumor, no perceptible hemorrhage. The patient desired to sit on the chamber, and I retired. She had no sooner got upon her feet than she fainted. I was hastily summoned, and found the countenance pale and sharp, surface cold and clammy, pulse rapid, wiry, and fluttering; made an examination, found the head had not receded; vomiting shortly occurred of dark, red fluid; assistance was summoned; forceps were applied, and a still-born fœtus delivered, followed by two or three quarts of blood. The child weighed between twelve and thirteen pounds. During my absence for aid, a change in the form of the uterine tumor had taken place, the uterus having broken away and occupying the right upper abdomen, the fœtus, the lower and left, the head not receded. Death ensued in less than two hours after the rupture. P.M.—No clots, no inflammation; the uterus was excessively large and firm. The rupture was a bilateral one, two and a half inches in extent of the vagina and cervix uteri at its posterior lip where it forms the *cul de sac*. On incising the uterus from the rent up to the fundus, the walls were found more than double their usual thickness. From this we inferred that such immense muscular power exerting its force from above, together with the large size of the fœtus, was the cause of this unfortunate occurrence.

Autopsy of a Case of Ruptured Uterus.—This case was seen only after death. At the autopsy, the following history was given. The patient, about thirty years of age, had had one instrumental labor; the second natural, and the third the fatal one. Labor pains began on the morning before death, but no presentation could be distinguished; later in

the afternoon the labor seemed nearer its close, but suddenly the contractions ceased, and pain in the epigastric region was complained of with dyspnœa. Forceps were used with great difficulty, and proving ineffectual to deliver, the perforator was used, and with much effort the head drawn down. A handkerchief was now tied about the neck of the fœtus, and three operators, by successive efforts, drew down and delivered the fœtus. The woman died in an hour. The fundus uteri extended to the umbilicus. Large clots were found in the abdomen, and also some fluid blood. A laceration existed on the anterior aspect at the junction of the vagina and uterus about three inches long, transverse in direction, with ragged edges and greatly ecchymosed. The antero-posterior diameter of the superior strait measured three and a half inches, the transverse five inches, the promontory was very projecting.

Case Simulating Rupture.—A multipara, æt 31 years, in her seventh labor; for some time the labor progressed slowly; suddenly, after a severer pain than she had experienced, she began to complain of pain in the epigastric region, which she compared to a "foot sticking in there," and she exclaimed that she "should burst." As she was ordinarily a quiet woman in her labors, some apprehension of rupture was felt. She felt weaker, but the pains continued. The membranes were ruptured, and in about an hour the fœtus was expelled alive. As the uterus contracted two distinct indentations or depressions were felt in the fundus. Four days after some fever developed, and the pulse ran over one hundred and twenty, but in about four days she was able to sit up.

Remarks.—Six cases of rupture are given as having been seen by myself, one furnished by Dr. E. W. Owen, and of one the autopsy only was witnessed. For the sake of convenience the result of the whole are tabulated. *Results.*—Of the eight cases, six proved fatal to the mother, and two recovered; to the child all were fatal. *Number of labors.*—All were multiparæ *Cause of rupture.*—Hydrocephalus of the fœtus in one case, contracted pelvis in two cases, and in

one case an abnormally thick muscular uterus, with a large child, was supposed to have been the cause. In one case there was reason to presume that mal-adroit attempts to deliver had produced a laceration. *Duration of labor.*—Two days or more in two cases. *Cessation of the pains.*—Occurred in four cases, *vomiting* noticed in four cases. *Presentation*—All were head. *Mode of delivery.*—By perforation in four cases, by forceps once, by turning once. Died undelivered one. *Lived after rupture.*—Recovered two. Death in eleven hours one, in ten hours one, in twenty-one hours one, in two hours one. *Seat of rupture.*—Anteriorly near neck in three cases; posteriorly one case, on right side in one case.

Inversion of the Uterus.—The only case in which this accident occurred was seen in connection with Dr. M. D. Van Pelt, by whom a report was made in the *N. Y. Medical Times*, for February, 1853. The case was one of interest in a medico-legal point of view, and also from the peculiar mode in which the inversion, or rather eversion occurred. The uterus was not indented from the fundus, but the inferior portion seemed to have turned out, giving a sort of trumpet shape to the lower part of the organ. Restitution was readily effected, and the woman recovered. Dr. V. P. has given the particulars of the case.

Monstrosities. *Case* 1.—*Anencephalous Fœtus.*—A multipara, aged 28, pregnant with her third conception, was prematurely seized with labor pains resulting from domestic calamity. At the first examination no presenting part could be discovered, the vagina being filled with the bag of waters. Some abnormity was suspected, and the membranes allowed to rupture spontaneously. The presentation of the face could be then made out but from the deficiency of frontal bone an anencephalous fœtus was inferred. At each pain, liq. amnii continued to gush, so that the bed was saturated, and a large puddle formed on the uncarpeted floor. Great exertion on the woman's part was necessary to deliver the shoulders, which were firm and brawny The fœtus just before expulsion gave a convulsive start, but was born dead.

Case 2.—Multipara with her fourth conception. During gestation she had had much domestic annoyance. On examination the face was found presenting, and the sharp edge of the frontal bone toward the right acetabulum, and beyond this a soft mass could be felt. The previous case led me to anticipate a similar fœtus. There was no profuse gush of waters, and no abnormal development of the body. The fœtus was a male and was born alive. It cried, passed urine, and fæces, and lived fifty hours.

Hydrocephalus.—Three cases have occurred, in all of which perforation was employed as the means of relief, and the cases will be found under that head.

The risks attending this complication are illustrated by two of the cases. In the first, which was a breech presentation, vesico-vaginal fistula resulted from the pressure which would not have occurred under more enlightened advice. With another case, rupture of the uterus took place with fatal issue. In the remaining case the diagnosis was so obscure, that three intelligent accoucheurs (one a Professor of Midwifery,) did not suspect the complication, until the perforator revealed the truth by a gush of serous fluid.

Vesicular Mole. *Case* 1.—A primipara, in about the seventh month of conception, had some hemorrhage, for which my attendance was requested under the supposition of placenta prævià. An expelled mass was shown, which on examination proved to be a conglomeration of vesicles, many of them being as large as a hazel-nut. Some similar bodies protruded from the os uteri which were removed. On inquiring into the history of the case the patient said, that for five months after supposed conception, she enlarged rapidly, less so after that. No motion had been felt. The areola was well marked. Ergot was advised to complete the expulsion of the "mole," but proved of little avail. On the next day another portion was spontaneously expelled, after which she left the asylum.

Case 2.—A multipara, in her second gestation. For three months the ordinary signs of pregnancy were present,

but about this time the nausea became more persistent and distressing, and severe neuralgia of the head occurred. Subsequently there was some slight hemorrhage, which lasted until visited a few days before the development of the case. After about eight hours of pretty severe pains, the os uteri became sufficiently dilated to admit two fingers, with which about a pint of "hydatids" were scooped out. Considerable hemorrhage took place during this process, and stimulants became necessary. Convalescence was slow, and on several occasions a few vesicles escaped with some hemorrhage. Neuralgic pains also, were severe, for which tonics were freely given. She recovered.

Forceps Cases. *Case* 1.—A primipara, having been for twenty-eight hours in labor, was delivered of a boy by means of forceps. The child was alive. In this case the membranes had been ruptured for thirteen hours, and the head on the perineum for about eight hours. The soft parts becoming hot and painful, with diminishing pains, delivery was deemed necessary.

Case 2.—A primipara, æt. 30. At the first examination the membranes were found to have been ruptured, and the os uteri of the size of a quarter dollar. Severe pains for nineteen hours proving ineffectual to deliver, forceps were used, and a male child born alive. For some time afterwards the patient complained of pain, and difficulty of moving the right leg.

In this case chloroform was used, and it was supposed to be the first case in which that anæsthetic was employed in midwifery in this city. The date was January, 1848.

Case 3.—A primipara, æt. 37. Membranes ruptured before examination, and the os uteri about one inch in diameter. In the course of four hours the os tincæ was dilated, and the head at the inferior strait in the right occipito-anterior position, but no progress beyond was made for eleven hours. The pubic arch was contracted. By the aid of forceps a female child was delivered almost lifeless, but was resuscitated. In delivering the placenta it was found to be

in a chamber, (as it were) of the uterus, produced by irregular contraction. Chloroform relieved this stricture, and delivery was readily completed.

Case 4.—A multipara, æt. 26, was delivered of her third conception, a girl, by forceps, after a labor of twenty hours.

Case 5.—The instrument used for the delivery of the head of the first twin, as referred to Case 17, of breech, and Case 9, of twins.

Case 6.—A primipara, æt. 24 years, delivered after a severe labor of forty-eight hours duration, of a living girl. Dilatation of the os proceeded but slowly, and after its completion the pains were not effective for delivery. The contractions commenced with apparent force, but, before producing expulsive effect, violent pain through the hips and down the thighs occurred, which seemed to cut short all bearing down effort. For this it was supposed that chloroform might be serviceable, but its use was overruled. Opium seemed to control it temporarily. Venesection was also used. As a final resort forceps were employed, and delivery easily effected. An adhesion of the placenta about two inches in diameter, presented the expulsion of the placenta, and required detachment manually. This patient was attacked with puerperal fever on the third day after delivery, and lingered until the seventeenth day when she died.

Case 7.—Referred to as Case 10, of twins. Protracted convulsions rendered delivery necessary, and as the head was in the pelvic cavity forceps were applied.

Case 8.—Referred to as Case 1, of rupture of uterus. Forceps applied but slipped from the yielding of the head—the fœtus being hydrocephalic.

Case 9.—Referred to as Case 3, of rupture of the uterus. The blades of the forceps sprung during traction, which was not severe.

Case 10.—Primipara, æt. 33. The membranes ruptured twelve hours after the commencement of labor, and slow progress was made for two hours, when the caput succedaneum was almost at the vulva. No progress was now made

for eight hours, and forceps were used. A living male child was born.

Case 11.—A multipara, æt. 23, in her third labor. Her attendant stated that the head had occupied the inferior strait for twelve hours without advancing. Four hours more were permitted to elapse before proceeding to delivery. This was readily effected by the short forceps; child lived.

Case 12.—A primipara, aged 20, was delivered by forceps of a male child (living), after a severe labor of thirty hours. For about thirteen hours there was no advance of the head, though the contractions were energetic.

Case 13.—A primipara, aged 27, was seized with eclampsia, on the day but one previous to visit, and at the time of delivery she had had fourteen convulsions. No fœtal pulsasation could be heard; but the use of forceps was deemed preferable to perforation. A still-born male child, weighing nine pounds and three-quarters, was delivered. The woman died of puerperal fever, which was prevalent at the time.

Case 14.—Case 3 of Placenta Prævià. A primipara, aged 29, was seized with flooding, during the seventh month of gestation, which continued for a fortnight before my visit. Natural efforts, though seconded by ergot, failed to deliver. The forceps were easily applied, and delivery quickly effected; but the hemorrhage had been too long continued, and the patient survived only an hour and a half.

Case 15.—A primipara, aged 24 years. After a slow progress of labor for seven hours, the head in the right-occipito-anterior position reach the perineum; here it remained stationary until forceps were used, twenty-nine hours after the commencement. In the meanwhile, she took some sour milk, which soon purged her freely, with borborygmus and pain. The use of instruments was advised, but rejected some hours before delivery. At the time of delivery the labia were œdematous, with a yellowish vaginal discharge, and pulse 130. The child, a female, was still-born. The patient had a protracted convalescence.

Case 16.—A primipara, aged 30. Had three convulsions

before delivery, which was effected by forceps, and subsequently one more. The child, a male, was still-born. Albuminuria existed.

Case 17.—A primipara, aged 33. At the time of visit she had been in labor about forty-eight hours, the membranes having ruptured about thirty hours. No progress had been made by the head for eight hours. The child, a girl, was born living, but lived only for a short time.

Case 18.—A primipara, aged about 30, strong and plethoric. About three hours after the commencement of labor, the water escaped. Her attendant had made attempts to dilate the os manually, and supposing that he had succeeded, was desirous that forceps should be used. At my first visit the os uteri was about one and a half inches in diameter, with a thick hard undilatable margin. Opium was advised, and this failing, chloroform was to to be given. In the afternoon she was again visited, her attendant stating that he had again "used manual dilatation, and with good effect;" that chloroform had been used, and the os was fully dilated. On examination the os uteri was about three inches in diameter, and rigid in the whole circumference. Venesection was advised. At the next visit, the os was fully dilated, and forceps were used, and a dead male child delivered, weighing ten and a quarter pounds.

Case 19.—Referred to as Case 11, embryotomy. Forceps were used prior to the perforator. A primipara, aged 30. Length of labor four days.

Case 20.—A primipara, aged 30. Position right-occipito-anterior. Labor tedious and with much pain posteriorly, even while the head was at the superior strait. A chill had occurred, and her attendant had deemed delivery advisable. Forceps were readily applied, and delivery effected. There was no pulsation in the cord around the neck, and the child, a boy, was still-born.

Case 21.—A primipara, aged 23 years, had been in labor for fifty hours. At the time of my visit the head was low in the pelvis, but uterine efforts did not advance it. After

watching for an hour, forceps were used and a male child was born living.

Case 22.—A multipara, aged over 35 years, with her fifth conception. On two occasions previously, instruments had been used. She had been in labor thirty-eight hours, and though the pains were strong, no progress was made to delivery. Chlorofo rm having been premised forceps were used, and, with severe exertion, a boy extracted still-born.

Case 23.—A primipara, æt. about 23. She was said to have been in labor for two days. No progress having been made for some hours, forceps were used. The delay was owing to the position, left occipito-posterior. A living male child was delivered.

Case 24.—Refer to Case 11, embryotomy. The forceps were readily applied, but traction did not cause the head to descend; and as the fœtus was dead, the perforator was preferred to the use of more violent exertion with the forceps. The patient was a primipara, æt. 27. The child a female.

Case 25.—A primipara, æt. 28 years, had been in labor four days. The child, a male, was born alive.

Case 26.—A multipara, æt. 43 years, with her eighth child. In the absence of her attendant, this patient was seen about midnight. Her labor commenced with rupture of the membranes; and about twelve hours after, her attendant gave her ergot, and left with the belief that the os uteri was fully dilated. On examination the os was about the size of a half dollar. The pains were ergotic, "crampy," continuous, and very distressing. In about four hours the os became dilated, except the anterior lip. About twelve hours after, as no progress was made, forceps were used, and after severe traction, a male child, weighing twelve pounds, was extracted alive.

Case 27.—A primipara, æt. 22 years, had been in labor about two days, and attempts made to deliver with forceps. On examination, deep and extensive lacerations of the labia were found, the result of the previous manipulations. No difficulty was experienced in locking the forceps, and deliver-

ing a still-born male child, of rather more than ordinary size and weight.

Case 28.—A primipara, æt. 25 years, strong, plethoric, and anasarcous, was taken with convulsions during the dilatation of the os uteri. For this she was bled. When seen, she had had seven more fits, and was lying in the coma of the last. On examination, the head was found in the cavity of the pelvis in the left occipito-anterior position. The urine had accumulated, and was removed by catheter; it was strongly albuminous to heat and nitric acid. The child was believed to be dead; nevertheless, forceps seemed advisable, and the event proved them to be the proper instruments. A living male child, weighing ten and a half pounds, was readily extracted. The placenta adhered, (Case 16.)

Case 29.—Referred to as Case 15 of twins. A primipara, æt. 33 years, being unable to expel the first twin, after forty-eight hours exertion, forceps were used, and a living male child delivered.

Remarks.—The most striking circumstance in connection with these cases is, the preponderance of primiparous patients. Of twenty-six cases, in which the number of births is noticed, five only were multiparæ,—twenty-one primiparæ. In the multiparæ, the reason for the use of the instruments was, in one, rupture of the uterus; in one, contracted pelvis, which had on a previous occasion necessitated their use; and in one, the imprudent use of ergot, with a very large child, had exhausted the uterine energies. In four cases, the forceps were used for convulsions, in only one of which the child was born alive; and one mother died of subsequent puerperal fever. The duration of labor varied from nineteen hours, the shortest period, to four days, the longest recorded. The time elapsing during the second stage of labor without progress, has been the criterion for the necessity of using instruments; and in reflecting on these cases, in two instances only has subsequent experience convinced me that nature would have equally well accomplished delivery. In some cases, the application has been too long postponed, and unpleasant consequences ensued. Of the two cases just

referred to, one was a head detained after a breech delivery, where proper manipulation would have secured extraction. The other was a simply delayed labor, where the short forceps were used. In all, except this case, the long forceps with a double curve have been used, and proved serviceable. It is often said that the hand that uses is of more consequence than the instrument to be used, a remark generally true, though not always so. On several occasions, my own forceps have succeeded where other instruments have failed; and in one case in particular, a pair of forceps yielded so much, in the course of extraction, as to permit the head to slip through, though the blades were correctly applied.

Results.—Of twenty-four children, fourteen have been born alive. nine are recorded as still-born. Of these nine, two heads were subsequently perforated, two were born in eclampsia, one died during unavoidable hemorrhage. Three mothers have died, two of fever and one of placenta prævià. *Sex.*—Recorded in twenty cases, of which fourteen were females.

The ages of mothers have ranged from 23 to 43 years, the majority being over 30.

Embryotomy. *Case* 1.—Was performed to deliver a large fœtal head. Though occurring in a public institution, no instruments were to be had for any operation, and in this case the perforator used was an ordinary pocket-knife.

Case 2.—Referred to as Case 3 of breech labors. In the same institution, no instruments being procurable, a trocar was used, and the opening made through the orbit.

Case 3.—The perforator used for an hydrocephalic child, the forceps having failed.

Case 4.—Also an hydrocephalic child. Forceps readily applied, but slipped. Referred to as Case 1 of rupture of uterus.

Case 5.—Referred to as Case 3 of rupture of uterus. The perforator used after the failure of forceps.

Case 6.—Case 4 of rupture of uterus.

Case 7.—A primipara. Duration of labor twenty-nine hours. No fœtal pulsation could be detected, and there was

a fetid odor from vaginal examination. After delivery by the craniotomy forceps, there was some hemorrhage. Recovery was tedious. Male fœtus.

Case 8.—A multipara, four days in labor with her second conception. When seen, a fetid odor was perceptible on vaginal examination, the soft parts hot and dry. This woman died of peritonitis.

Case 9.—A primipara, æt. 26, had been in labor for five days before visit. Vaginal examination gave ample evidences of decomposition. In delivering the fœtus, the bones of the head came away separately, as also the clavicle and some ribs. The remnants of the fœtus without the brain and bones weighed eight and three-fourth pounds. The patient lived only two days.

Case 10.—A primipara, æt. 18, was delivered, after a labor of two days. The cord prolapsed by the head, and was pulseless for twenty-four hours. Delivery was readily effected. The woman died.

Case 11.—A primipara, æt. 32 years, had been in labor when seen for two days, during which time ergot had been given, and attempts made to deliver with the forceps. When visited, the caput succedaneum was found distending the vulva, but delivery was impeded by the narrowness of the bis-ischiatic diameter, which was not more than three inches. At the request of the attendants, an attempt was made to apply forceps, but it proved, as was anticipated, unavailing. The perforator was then used, and even after the brain was evacuated, much difficulty was experienced in delivering the head. No less trouble was experienced in delivering the body. The cuticle peeled readily, showing the death of the fœtus before perforation. The uterus contracted irregularly, and the hand was passed to effect the detachment of the placenta.

Case 12.—This case had been under the charge of two different practitioners; the first of whom said he had found an arm presenting, which he had returned, and then resigned the case to the second, who found the cord prolapsed and the face presenting in the left mento-iliac position. He had

tried forceps ineffectually. On visiting the case, about a foot of the funis was found prolapsed, the face was at the superior strait, looking to the left side, the chin being posterior. The cord being pulseless for a long time, the child was presumed to be dead, and cephalotomy the proper means of delivery. The perforator was pushed through the scalp-tumor which had formed on the right frontal bone, and after breaking up the brain, delivery was effected by craniotomy forceps and the crotchet. As the head was being delivered, the occiput rotated upon the crotchet as a pivot from right to left, into the hollow of the sacrum, and was thus delivered, the chin being under the pubes; restitution occurred toward the left thigh. The shoulders were delivered manually, and the placenta passed without assistance; child, a male.

Case 13.—A primipara, aged 30, had been in labor four days before my visit. The pulse was 122, with no abdominal soreness; the bladder was distended. Per vaginam the head was pressing upon the soft parts, the sutures sharp and bones overlapping. There was no uterine contraction, and had been none for five hours. The catheter was passed. After an unsatisfactory attempt with the forceps, the scissors were used. By the crotchet the cranium was pulled away piecemeal, and, with much difficulty, the remnant of the head and body were delivered, a great explosion of fetid gas following the expulsion. The placenta was found enclosed in a chamber; and was delivered manually.

Case 14.—A primipara, aged 27, had been in labor for three days prior to my seeing her, the membranes having ruptured within seven hours after the commencement. Per vaginam, the scalp was found turned, and the edges of the bones sharp, the presentation being right occipito-anterior. The inferior strait was contracted, the pubic arch being like that of a male pelvis. The abdomen presented two tumors, divided by a sulcus, which appearance was quite deceptive, as the catheter was stated to have been recently passed. This proved to be an error, for on the delivery of the head, urine gushed out very freely. Forceps were first tried, and though easily applied, produced no effect, and the perforator

was then resorted to. Severe traction was requisite, but delivery was finally effected, and the woman recovered.

Remarks.—Of the fourteen cases, one only occurred in my own practice, viz.: the breech case, in which hydrocephalus caused the delay in expelling the head. In no case has a living child been sacrificed, a circumstance attributable to the natural repugnance every conscientious practitioner feels to destroying life, even in emergencies. As, with the one exception, all the cases were seen in consultation, much delay had occurred in seeking advice, and there has been no ground for hesitating as to the mode of delivery. Evidences of fœtal death have been, in all cases, manifest. So much has this been the case, that it has materially influenced the result to the mother; for out of the fourteen cases, no less than five women have died. Of these, one death was from rupture of the uterus, and four from fever. Of ten cases recorded, only one occurred in a multipara. The reason for operating is noticed in eight cases, three were for ruptured uterus; three children were hydrocephalic; twice the funis was prolapsed and pulseless.

Unclassified Cases. *Case* 1.—*Presentation Occipito Pubic.*—A German woman, æt. 36 years, pregnant with her sixth child, was delivered, after a very tedious labor of twenty hours. Her previous labors had been easy and rapid. In this, though the contractions were sufficiently energetic, but little progress was made, owing to the position of the child. At the superior strait, the presentation was easily made out by the occipital and sagittal sutures. The latter occupied the antero-posterior diameter of the superior strait, and the head was with difficulty expelled in this position.

Case 2.—*Labor with Disease of Heart.—Death.*—A multipara, in her seventh pregnancy, began to complain about two months before term. Irritability of stomach, deficient secretion of bile, scanty and high-colored urine, the pulse full and bounding, were prominent manifestations. Venesection relieved the symptoms temporarily. A week later she was troubled with cough and slight hemoptysis, for which no

pulmonary cause could be found. On consultation, the venesection was repeated, and antimonials used, with good effect. The cough subsided, and the urine became copious, having no albumen in it. A careful examination of the heart now discovered hypertrophy, with a systolic murmur, having its intensity over the aortic valves. The improvement lasted about a fortnight, and the patient suffered more than before. The respiration was difficult, and she could not lie down ; the sputa were streaked with blood. A different consultant was called in, who advised enemata of turpentine and a solid diet, in order to relieve flatulence. These measures did not relieve. The pulse was tense, strong, and bounding, causing the radial and ulnar arteries to start, with the violence of the pulsations ; the cough was frequent, and expectoration bloody. A small bleeding was ventured, but the force of the pulse was broken at once, and the arm tied up. On renewed consultation, it was determined to anticipate labor ; and, to induce premature contraction, compressed sponge was inserted within the cervix, and the vagina plugged. These measures seemed to coincide with labor, though the patient was not conscious of it ; for in about four hours the os uteri had dilated to two inches in diameter, and the membranes had ruptured spontaneously. No relief was obtained by the evacuation of the liquor amnii. While I was in an adjoining apartment, she arose to the close stool, and when called, I found the head had emerged while in that position. The patient was placed in bed, and soon the body of a female child was expelled living. The placenta remained partly within and partly without the os uteri, strong pressure being kept up over the fundus uteri ; but there was no flooding. After some effort on the woman's part, and the ineffectual use of ergot, the placenta was delivered manually and with less than the usual loss of blood, and the uterus contracted well. The patient could not be kept recumbent, but tossed around violently, gasping for breath, but no flooding occurred. Stimulants were actively given for more than an hour, when she started up wildly, gasped, and died.

Case 3. — *Dyspnœa after labor threatening dissolution.*—

A multipara, aged 30 years, with an obscure cardiac affection (hypertrophy) was troubled with dyspnœa during the latter months of gestation, which precluded exertion even to a moderate extent. The labor was short, the pains being lengthened and efficient, but all outcry was stifled by self-control. No hemorrhage succeeded delivery, but almost immediately after the difficulty of breathing became very alarming, the face became lurid, the nails purple, the pulse weak, irregular and intermittent, and she was compelled to sit up in order to breathe. Stimulants were freely used by mouth, and to the nose, and a sinapism laid between the shoulders. Relief gradually ensued, and she recovered without return of the distress.

Case 4.—Was requested to see, in consultation with two practitioners, a primipara, aet. 30, who had been in labor for two days, the membranes having ruptured early, and the subsequent progress being slow. Her attendant was sitting by the bedside, and stated, that about three hours before, the pains had been active and delivery seemed imminent, but suddenly the pains had ceased. The head, he said, was impacted, and the catheter would not pass. The pulse was 100, the skin cool but not clammy. On examining the abdomen, the bladder was much distended. On attempting to pass into the vagina, the head was found delivered, the scalp emphysematous, and the bones loose. Her attendant was much surprised. He was requested to complete the delivery, and with some trouble, owing to the putrid state of the fœtus, did so. Immediately on the expulsion, an explosion of fetid gas occurred, and the bladder was evacuated spontaneously. The woman subsequently died.

Granting her accoucheur's account to be strictly correct as to the cessation of pain, and his *subsequent* examination finding the head still under the pelvis, what effected the delivery? Was it the development of gas by decomposition that silently extended the head?

Case 5.—*Elongated anterior lip of cervix.*—A multipara with her second child. On making the usual vaginal examination, the os was found about two-thirds dilated, and a teatlike pro-

jection attached to the anterior lip. After some time she rose from her bed to go to stool, and was found upon her hands and knees, the child being on the floor, and having lost considerable blood. The cord was divided, and as the woman continued to lose blood, she was replaced in bed before delivering the placenta. This having been done, firm pressure was made over the uterus, which caused the escape of blood and coagula. Per vaginan were found clots, and another substance which was supposed at first to be a clot firmer than the rest. On tracing it up, however, it was found to be the anterior lip of the uterus, elongated sufficiently to protrude from the vulva, about one inch wide at its apex, and gradually widening to its base. This was not interfered with. A similar case had been related to me a few days previous by Dr. Beadle.

Case 6.—*Good effects of chloroform.*—A primipara, the wife of a medical gentleman, had been in labor when seen, for several hours, the os being dilated, and the pains slow and inefficient; simple delay was advised. The next day, as no progress had been made, ergot was suggested, but no good effects were obtained from it. Her husband had also used chloroform. In the night it was thought advisable to use forceps, as the labor had continued about forty-three hours, the head occupying, for a long time, the inferior strait without advancing for several hours. As a preparatory step chloroform was used, and as soon as the full effect was obtained, the operation was commenced. On attempting the passage of the first blade the head was found descending, and of course the natural efforts were allowed to complete the delivery. The child, a boy, was born asphyxiated, but recovered. In this case two causes had acted to impede labor, first the pains were inefficient, while the second and principal cause was great sensitiveness of the external parts. Chloroform acted kindly in relieving this hyperæsthesia, and then the uterine efforts sufficed to expel the fœtus through a vulva, relaxed also probably by the anæsthetic.

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